

# National Transportation Safety Board Aviation Accident Final Report

Location: MEMPHIS, TN Accident Number: MIA98LA024

Date & Time: 11/06/1997, 1956 CST Registration: N59316

Aircraft: Douglas DC-3C Aircraft Damage: Substantial

Defining Event: Injuries: 2 None

Flight Conducted Under: Part 91: General Aviation - Positioning

## **Analysis**

The PIC stated he was established on an instrument approach when the left engine fuel pressure dropped to zero and the engine quit. He moved the fuel selector to the right rear fuel tank and the engine started. He continued the approach for about 2 miles when the right engine quit followed by the left engine. He made a forced landing to a sand bar. Examination of the airplane revealed the fuel tanks were not ruptured and the fuel tanks were empty.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's improper management of fuel resulting in a total loss of engine power on both engines during an instrument approach due to fuel exhaustion.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: APPROACH

**Findings** 

1. ALL ENGINES

2. (C) FLUID, FUEL - EXHAUSTION

3. (C) FUEL MANAGEMENT - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

**Findings** 

4. TERRAIN CONDITION - SAND BAR

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#### **Factual Information**

On November 6, 1997, about 1956 central standard time, a Douglas DC-3C, N59316, registered to McNeeley Charter Services Inc., operating as a 14 CFR Part 91 positioning flight, experienced a total loss of engine power on an instrument approach, and made a forced landing to a sand bar in the vicinity of Memphis, Tennessee. Instrument meteorological conditions prevailed and an IFR flight plan was filed. The airplane sustained substantial damage. The airline transport-rated pilot-in-command and commercial rated first officer reported no injuries. The flight originated from Gulfport, Mississippi, about 2 hours 11 minutes before the accident.

The PIC stated they were in cruise flight at 6,000 feet about 30 miles south of Memphis, Tennessee, when the left engine fuel pressure started to fluctuate. He turned the boost pumps on and switched the fuel selectors from the front fuel tanks to the rear fuel tanks. ATC was notified and priority handling was requested and received. The front fuel gages indicated 25 gallons per side and the rear fuel gages indicated 50 gallons per side. They received clearance for an NDB approach and to descend to 2,000 feet. They were established on the approach at 2,000 feet about 8 miles south of the airport, when the left engine fuel pressure dropped to zero and the left engine quit. The fuel selector was moved to the right rear fuel tank and the engine started. The rear fuel gages indicated about 30 gallons of fuel. They continued for about 2 miles when the right engine quit followed by the left engine. The PIC informed ATC they were going down and maneuvered the airplane for a forced landing to a sand bar on the Mississippi, River.

Examination of the crashsite revealed no evidence of a precrash mechanical failure of the airframe, and flight control assemblies. The four fuel tanks were not ruptured and no fuel was present in the fuel tanks.

NTSB Form 6120.1/2 Pilot/Operator Aircraft Accident Report was faxed to the registered owner on November 7, 1997 requesting a detailed written statement from the PIC and the first officer. The completed form was faxed back to the NTSB investigator-in-charge on November 13, 1997. A detailed statement from the PIC and first officer was not submitted.

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## **Pilot Information**

Certificate:	Airline Transport	Age:	33, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	12/26/1996
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	7853 hours (Total, all aircraft), 2603 hours (Total, this make and model), 7265 hours (Pilot In Command, all aircraft), 246 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Douglas	Registration:	N59316
Model/Series:	DC-3C DC-3C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Transport	Serial Number:	18986
Landing Gear Type:	Retractable - Tailwheel	Seats:	4
Date/Type of Last Inspection:	10/25/1997, AAIP	Certified Max Gross Wt.:	25200 lbs
Time Since Last Inspection:	79 Hours	Engines:	2 Reciprocating
Airframe Total Time:	24516 Hours	Engine Manufacturer:	P&W
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	1830-92
Registered Owner:	MCNEELEY CHARTER SERVICES INC.	Rated Power:	1200 hp
Operator:	MCNEELEY CHARTER SERVICES INC.	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	MEM, 332 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	2038 CST	Direction from Accident Site:	<b>79</b> °
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	8 Miles
Lowest Ceiling:	Overcast / 900 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	8°C / 7°C
Precipitation and Obscuration:			
Departure Point:	GULFPORT, MS (GPT)	Type of Flight Plan Filed:	IFR
Destination:	WEST MEMPHIS, AR (AWM)	Type of Clearance:	IFR
Departure Time:	1745 CST	Type of Airspace:	Class D

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	CARROL A SMITH	Report Date:	04/10/1998
Additional Participating Persons:	CRAIG T CURTISS; MEMPHIS, TN		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:publinq@ntsb.gov">publinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.ntsb.gov/pubdms/">http://dms.ntsb.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available here.

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